What Is Claimed Is:

1. A frame synchronizing signal detecting method, wherein the method is used in a data multiplexing transmitter-receiver which is provided with a transmitter-receiver that transmits and receives at least a radio-frequency signal, a modulator-demodulator that coverts the radio-frequency signal to a baseband signal and converts the baseband signal to the radio-frequency signal and a baseband signal processor that processes the baseband signal and in which the baseband signal processor is provided with a frame synchronizing signal detector; and

wherein when a frame synchronizing signal included in received data is detected, the frame synchronizing signal detector sets a detection precision of the frame synchronizing signal before a frame synchronization link is established to a high value and sets the detection precision of the frame synchronizing signal after the frame synchronization link is established to a lower value than the high value.

2. A frame synchronizing signal detecting method according to Claim 1, wherein the frame synchronizing signal detector is provided with a shift register that temporarily stores received data, a frame synchronizing signal storage that stores a frame synchronizing signal, a comparator that detects coincidence of the frame synchronizing signal extracted from the shift register and the frame synchronizing signal output from the frame synchronizing signal storage, a counter that

counts a coincidence output of the comparator, a detection precision setting device that sets the detection precision of the frame synchronizing signal to one of the high value and the low value according to a value of the counter and a frame synchronizing signal detection signal output device that detects a frame synchronizing signal from the received data with detection precision set by the detection precision setting device.